

NASA IV&V Facility

2009 Workshop on Validation and Verification: Technology Roadmap

September 15th – 17th, 2009

West Virginia High Technology Consortium Foundation
Research Center Fairmont WV 26554



NASA IV&V Facility, Technology Park

The NASA Independent Verification and Validation (IV&V) Facility will be holding a workshop focused on advancing the discipline of validation and verification.

The purpose of the workshop is to offer an extensive understanding of the discipline of IV&V and to identify key areas for advancement at NASA. While capturing and sharing engineering knowledge, the workshop will facilitate the identification of best engineering practices and the needed advancements in applying IV&V on NASA's critical system software. The outcome of the workshop will be the development of a **technology roadmap** that will be used in planning and prioritizing IV&V engineering enhancements to be applied on NASA's missions.

More Information: <http://www.nasa.gov/centers/ivv/home/index.html>

What You Can Expect

The NASA IV&V Program validates and verifies system software using a reference model based on UML that represents the IV&V team's understanding of:

- 1) What the system software should do,
- 2) What the system software should not do, and
- 3) What the system software should do under adverse conditions.

This model then serves as the framework to validate the mission's requirements and testing approach and to verify the mission's architecture, designs, and implementation.

Attendees will walk away with an understanding of the engineering approaches used by IV&V and will be able to participate in discussions that identify best practices and areas for advancement. Discussions will involve:

- Modeling system software behaviors using UML and establishing executable models
- Using these models as the basis for validating requirements and testing strategies
- Using these models to verify architectures, designs, and software implementations
- Using these models to support independent testing and the verification of safety and dependability requirements

***Please respond by 9/4/2009 to Marcus Fisher (Marcus.S.Fisher@nasa.gov)
if you intend on participating.***

NASA Independent Verification and Validation (IV&V) Facility

Workshop on Validation and Verification

Date: September 15-17, 2009

Location: I-79 Technology Park Research Center, 1000 Galliher Drive, Fairmont, WV 26554

Delivery Method: Presentations, Group Discussions, Guest Speakers

Keynote Speaker: TBD

Fee: There is no fee to attend. Attendees are responsible for covering all meals. There will an organized dinner Wednesday night for \$15 per person. Snacks and beverage/coffee service will be provided during morning and afternoon breaks.

Workshop Schedule Coming Soon!

Local Information for Fairmont Area

Food

Cracker Barrel	Casual	(304) 363-2884	2206 Pleasant Valley Rd
Muriales	Italian	(304) 363-3190	1742 Fairmont Ave
Applebee's	Casual	(304) 366-4411	25 Southland Drive
Grand China Buffet & Grill	Chinese	(304) 366-1318	9685 Mall Loop
Hanks Deli LLC Middletown Mall	Sandwiches	(304) 368-3354	2500 Fairmont Ave
Bob Evans	Casual	(304) 366-9735	2940 Fairmont Ave
Mi Pueblo	Mexican	(304) 363-9355	2500 Fairmont Ave

Lodging

Marriott Fairfield Inn & Suites	(304) 367-9150	27 South Land Drive
Wingate Inn	(304) 808-1000	350 Conference Center Way, Bridgeport, WV
Comfort Inn & Suites	(304) 367-1370	1185 Airport Rd
Days Inn	(304) 366-5995	166 Middletown Rd
Holiday Inn of Fairmont	(877) 863-4780	930 East Old Grafton Rd. & I-79
Waterfront Hotel	(304) 296-1700	2 Waterfront Pl # 100, Morgantown, WV

Transportation

Fairmont-Marion County Transit Authority	(304) 366-8177	400 Quincy Street
Enterprise Rent A Car	(304) 363-9391	14 Tygart Mall Loop

Travel Information & Directions

Airport	Code	Distance from Resort
Pittsburgh International Airport	PIT	approx. 115 miles
Yeager Airport	CRW	approx. 130 miles
Morgantown Municipal Airport	MGW	25 miles

Driving Directions to the I-79 Technology Park Research Center

Be cautious using the directions from any of the online map services. The directions, once you leave the interstate, can vary from either very scenic to significantly wrong.

From I-79 South (from Morgantown):

Take Exit 132 (South Fairmont)

Make a left turn at the stoplight onto Route 250 South

Turn right onto NASA Boulevard at the next light (next to Dan Cava Toyota)

Near the top of the first hill, turn right onto Galliher Drive

Immediately turn right at the second driveway (cut-through) to the I-79 Technology Park Research Center

From I-79 North:

Take Exit 132 (South Fairmont)

Make a left turn at the stoplight onto Route 250 North

Turn left onto NASA Boulevard at the next light (next to Dan Cava Toyota)

Near the top of the first hill, turn right onto Galliher Drive

Immediately turn right at the second driveway (cut-through) to the I-79 Technology Park Research Center

